A new international study led by La Trobe University researchers, and published in *PLOS One*, has revealed the reasons why some new mothers produce less breast milk than others.
The survey of almost 500 women in Australia, the U.S., and the U.K., found that women with low milk supply often did not notice an increase in breast size during pregnancy; could have breast hypoplasia; or may have been overweight as a teenager.

La Trobe Ph.D. candidate and study lead, Renee Kam, said it had long been suspected by breastfeeding specialists that a lack of breast growth during pregnancy could be associated with low milk supply, but this study is the first to show evidence of this link.

"This study showed that 72% of women with low milk supply reported that their breasts did not change appearance during pregnancy," Kam said.

"Most pregnant women notice that their breasts increase in size as their pregnancy progresses, so lack of change could now be considered a sign to health professionals that milk supply may become an issue after the baby is born."

The study, conducted with Universities of Cincinnati and Bristol, also connected high body mass index around the time of puberty and a low milk supply.

Kam said this was the first time such a link was made, and its connection needed to be confirmed in population-based studies.

Kam said the researchers did not know how many women in the study had breast hypoplasia, but more than two-thirds (about 70% percent) reported at least one irregular-shaped breast.

Breast hypoplasia is not the same as small breasts, but refers to breast tissue that is underdeveloped which may give the breast a tubular shape or asymmetry between the breasts.
Study participants shared their experience of not being able to produce enough milk for their babies, despite seeing lactation consultants, expressing breast milk, taking lactation cookies, and drinking lactation teas.

Despite following the usual protocols to increase milk production, they were physically unable to make enough milk.

One distressed participant wrote, "I finally learned that 'all women make enough milk' was a lie. No amount of education or determination would make my breasts work. I felt deceived and let down by all my medical providers. How dare they have no answers for me when I desperately just wanted to feed my child naturally."

Professor Lisa Amir from La Trobe's Judith Lumley Center said some women had physical and physiological reasons that prevented them from producing a full milk supply.

"Like every other organ, the breast may not be fully functional in some people," Professor Amir said.

"We need to support women to achieve their optimum milk production, and make sure people don't equate successful breastfeeding with being a good mother."


Provided by La Trobe University